Section 36 then provides that after *another* notice to the owner, and receiving his explanation or objection, the land may be *taken under the control of the forest officer*, subject to all or any of the provisions relating to regularly constituted forest estates, *i.e.*, "reserved forests" (Chapter II).

The management is undertaken accordingly, and the profits are paid over to the owner after deducting cost of management (*i.e.*, the Act speaks of net profits)[7].

§ 8.—*Cases where actual Expropriation is requisite.*

There are cases, under the circumstances indicated, where the danger is very imminent and where the land is in a bad state, and where it would be really the best plan for all parties that Government should acquire the estate outright. Where this is the case, section 37 gives *power to Government to expropriate* the land for a suitable indemnity under the Land Acquisition Act.

In *any* case, where a notification under section 35 has been issued if the Government interference is kept up for three years, the *owner may require* Government to expropriate the land. But his claim to this effect cannot be made *before three years, nor after twelve years* from the date of the notification.

§ 9.—*Voluntary Submission to Conservancy.*

Anybody may, under this chapter (section 38), either because his estate is becoming deteriorated, or otherwise, apply to Government to take it under forest management.

Section II.—European Law regarding private Forests and others having a protective character.

§ 1.—*Object of the Section.*

It will now be instructive to compare this Indian procedure

[7] But, I take it, this means the cost of establishment and supervision (proportionate share of the supervising officer's pay and allowances) and of ordinary work; not the extraordinary expenditure on planting and reboisement appliances, because such works are by the last clause of section 35, constructed by Government at its own expense.

with the law in other countries. This will establish the reasonableness of such an interference as was legalised, and, moreover, some special points may come under our observation worthy of introduction in our practice.

§ 2.—*The French Law regarding private Forests.*

The French law at the outset states that private forest-owners will enjoy their property fully, subject only to the provisions of the Code. Those provisions will be found in Articles 117-124, and Articles 136 and 219. The last is the really important one.

Under it the clearance of forest (défrichement) is not allowed without the proprietors giving four months' previous notice at the office of the Sous-préfet. But under certain circumstances (to be stated presently) the Forest Department may record an *objection* to the clearance.

The process of objecting is this: the Forest Department gives warning to the parties interested, and sends an officer to inspect the place and draw up a minute report on the state, situation, and circumstances of the forest. This is communicated to the forest owner, who is at liberty to record remarks on it. This "procès verbal," when filed in reply to the notice, constitutes the departmental act of objection to the clearance.

The Préfet in Council now considers the matter, and notice of his decision or opinion is given to the forest officer and to the proprietor, when the whole proceedings are sent up to the Minister of Finance, who after consulting the proper section of the Conseil d' E'tat, finally decides the matter.

The Minister must give his orders within six months of the departmental objection being signified, or else the proprietor is at liberty to proceed with the clearance.

Article 220 states the circumstances under which the Forest Department can file this objection; it is when the preservation of the forest "is recognised as necessary"—

(1) for the maintenance of the soil on mountains and slopes;

(2) for the defence of the soil against erosion and being

flooded and overborne (*envahissement*) by streams, rivers, or torrents;

(3) for the maintenance of the water-supply in springs and streams;

(4) for the protection of dunes and the coast against erosion by the sea, and the spread of sand;

(5) for the defence of any territory in such part of a frontier zone as may be specified by a public order of the Administration concerned;

(6) for the benefit of the public health (*salubrité publique*)[8].

The other provisions of the Code, Articles 117—121, &c., relate to minor matters. Private forest guards must be approved by the Sous préfet and must take the oath of forest service. Private proprietors may claim to free their forests of rights by the same means as Government can by "cantonnement" and money compensation; so a private proprietor can keep grazing out of the growing portions of his young forest, and can apply to the Administration to declare what parts of his forest are not safe against cattle and should be kept closed[9].

A proprietor who makes a clearing after it has been prohibited is liable to a fine of at least 500, but not more than 1,500 francs, for

[8] Certain lands are not considered "forests" for the purposes of this Article, for example, a park or pleasure-ground attached to a dwelling-house, and generally small plots of woodland not exceeding 25 acres in extent, unless such plots are on the summit or slopes of a mountain, when they are not excepted. An important exception also is that if the wood has been planted within the last 20 years, it is exempt. The idea involved in this rule is, that the forest is not a gift of nature, which the proprietor can be asked to use for the benefit of the neighbours as well as himself; he planted the wood, and if he had not done so, there would have been none, so that no one can complain if by cutting it down he merely leaves things no worse than they were naturally (Article 224). All plantations of trees on the tops and slopes of mountains are declared exempt from all taxes (de tout impôt) for 30 years by Article 226. This is to encourage planting in such situations.

[9] Article 124 gave a right for ten years after the passing of the Code to the Marine Department to have a first refusal of oak trees of a certain size whenever cut for sale; this has now expired.

Article 136 requires certain facilities to be afforded in getting 'oseraies' (willow branches) from private forests for the Rhine embankment works.

every hectare cleared (that is approximately 80 to 240 *rupees* per *acre*), and to be made to replant the cleared places within three years. If this is not done, the department may, on an order of the Préfet, do the planting by its own agents, and recover the cost from the defaulting proprietor.

These provisions of the law are general, and besides them there are the special laws for reboisement and covering with turf and herbage (regazonnement) denuded mountain areas, and printed together with the Forest Code in the small departmental edition.

§ 3.—*Law of Reboisement and Regazonnement.*

It will not be necessary to do more than glance at the principal provisions of the law of reboisement. The still existing law is contained in the reboisement law of July 28th, 1860, and a subsequent law of 1864. But a project for a revised and much simplified law has been adopted by the Senate and submitted to the Chamber of Deputies in January 1881, and it seems in every respect probable that the law will be passed.

The law of 1860 had some rather complicated provisions for publishing by the Executive Government a "declaration of public utility," and then the perimètre to be operated on was declared, after an enquiry by a series of authorities, among whom was a special commission. It seems that this discussion included the question whether the work was needed at all, and whether there was any danger, which it seems very useless to allow, since the professional advisers of Government are the best judges of that.

Various provisions were made in cases where private or communal owners of land in the declared perimètres, undertook to do the work themselves. There was at first much opposition to the law, and it was urged that in a great many cases it would be as well or better not to create forests (*reboise* the lands), but to restore the *grazing* ground, *i.e.*, the soil would be consolidated by restoring its covering of turf and herbaceous plants; this of course could be done with much less restriction on the communes, and in a much shorter

time than reboisement. A further law for "regazonnement" was then passed in 1864. Any perimètre formed under the law of 1860 might, on application of the commune, be reconsidered, and the order for its reboisement altered by the substitution in whole or in part of *regazonnement*.

The proposed law to which I have alluded (and of the passing of which I have yet no news) combines and supersedes these laws, but it will deal with the old areas declared under the law of 1860-64 in the following way. It will give the Forest Department three years to consider the whole subject, the areas being meanwhile maintained *in statu quo*. Within this period the Forest Department are to consider what lands it will be desirable to retain, and to publish a list accordingly. All lands not shown in the list will then revert to the unrestricted enjoyment of the proprietors. A further period of ten years is fixed for the settlement of all claims which may arise consequent on the expropriation, according to the new law, of the lands which are selected (and which, under the old law, may not have been entirely expropriated).

The new law will deal with the entire subject of mountain slopes and their preservation.

Where there is a real danger actually existing—the soil already ruined, and torrents formed—works of restoration will be necessary. This necessity will be declared by a special law passed by the Chambers.

The passing of the law will be preceded (1) by an enquiry in each commune concerned; (2) by a deliberation of the Municipal Councils of each commune; (3) by a reference to the Council of the *Arrondissement*, and of the *Conseil Général*; (4) by a further reference to a special committee under the presidency of the *Préfet*, certain members of the Councils, two members to represent the interested communes, one engineer and one forest officer. But I understand that there is a wide difference between the proposed and the earlier law in this respect. The necessity for action and the existence of the danger will be taken for granted when once the "law" for the

undertaking of the work is issued. Any further objection will relate only to the extent of the perimètre and other subsidiary matters.

The works on the perimètre are undertaken by the State, and the area is acquired as State property, either by amicable arrangement or under the law of expropriation.

Private persons, communes, &c., will, however, be allowed to avoid expropriation and undertake the works themselves, if they can come to suitable terms with the Government: and they may form "associations" with a certain legal status, in order to carry out works which would perhaps be beyond the power of any one estate by itself.

When there is not this actual existing danger, but only a desire to preserve the forest so as to prevent the possibility of danger[10], the law allows public aid to be given (by gratuitious gifts of seed, plants, &c., or by money grants), in order to promote works of plantation and so forth. The Article 224 of the Code, which

[10] The details of procedure, as to how private persons are to signify that they will carry out works, and when their refusal may be assumed; how the works are to be carried out on lands expropriated, and how an account is to be sent in showing what the cost has been (and this sum he will have to pay back, if he claims the restoration of the land), and all other matters will be contained in an Ordinance to carry out the law, which, in fact, is like our "Rules" made under the Act.

The procedure under the law is somewhat elaborate, and it certainly is far too much so for any Indian districts. The fact is that ignorant municipalities might, and I believe do or did, give very great trouble, and put every obstacle in the way of reboisement work. Such a law, so restrained by the elaborate procedure for consultation and revision of every project, before the orders for the work can issue, would certainly be inefficacious but for the progress of public opinion, the fact that in many cases the perimètres have got so bad that the necessity for action has become obvious now to the most unreasonable, and above all the example that successful works set to the communes in the country round.

It must of course much depend on the angle of inclination, the elevation, the nature of the soil, and other circumstances, what sort of work for restoration, whether replanting or turfing, or growth of herbaceous plants, is enough. Sometimes alternate belts of meadow land and wood prove useful.

A system of fruitières has been established in connection with gazonnement works, which I understand to be reserves for the production of seeds of forage plants on the large scale and of roots for cattle feeding. Such devices tend largely to diminish inconvenience and opposition to the necessary works of closing the area against grazing a necessity which no country and no climate can avoid.

ordinarily excludes plantations made within the last 20 years by the proprietor from the rule which restricts the total clearance of forest land, is declared not to extend to any reboisement made under this law.

In the same way, where it is sufficient merely to stop or regulate grazing, without taking up a perimètre for regular reboisement operations, the land can be subjected to protective closing against grazing (*mise en defens*). This can be done whenever "the soil shows signs of being cut up by ravines or the soil deteriorating." The forest administration here can submit a formal demand for the '*mise en defens*.' It is considered by the same series of Councils, &c., as before, and the matter is decided by the *Préfet*. The closing is to last for 10 years, but may be renewed with the same formalities. The rights stopped by this closing are compensated. The sum paid goes partly to the municipal fund of the commune, partly to the inhabitants of the commune whose rights are suspended. The forest law penalties are applied in cases of infringement.

A third stage is also contemplated, *viz.*, when neither there is an actually existing state of denudation or torrent action, &c., nor a danger such as would demand a closing of the area, but simply when the pasturing of cattle ought to be regulated so as to preserve the grazing-ground from deterioration. The communes in which this is necessary are to be declared in a list prepared by the Forest Department. These communes are themselves to propose the regulations they think will suffice, and these will extend to fixing the *number* and *kind* of cattle which may be allowed to graze, the beginning and end of the season of grazing and any other conditions necessary to impose. If they neglect to do so, or if the Forest Department do not approve of the proposals, and the communes decline to introduce the necessary amendments, the Préfet is given power to enforce the regulations recommended by a special committee assembled for the purpose of deciding the matter. Certain penalties of the ordinary criminal law are applied in case of a breach of the regulations.

§ 4.—*The Prussian Law.*

I will now turn to the illustrations afforded by German legislation.

In Prussia a law was passed in 1875[1], which applies to all forests which have a "protective" character. Practically, as State and other public forests are already under the forest *régime* (which is not affected by the law in question), this law chiefly affects private forests.

The list of circumstances under which action may be taken is given here for the sake of comparison with that in the Indian Act. Forest has a protective character and its destruction may be prevented when—

(*a*) The soil is sandy, and consequently neighbouring lands, public works, and watercourses, natural or artificial, may be covered up or choked with sand which would be let loose by the destruction of the forest which winds the soil and covers its surface.

(*b*) Where, as a consequence of erosion of the soil, or the formation of ravines and torrents on denuded summits and slopes of mountains, subjacent properties, roads, or buildings are menaced with injury, or with being buried beneath landslips and falls of stones, or even with being carried away by the landslip itself.

(*c*) Where, if forests on the borders of rivers and watercourses were destroyed, the neighbouring estates might be liable to damage from floods, or where works of all kinds are protected by forest from the effects of the rush caused by the sudden melting of ice and snow.

(*d*) Where the clearing of forest growth would diminish the water-supply in streams and rivers.

(*e*) Where such clearing might, in country of an open or generally bare character, or in the neighbourhood of

[1] Jahrbuch des Preussischen Forst, 1876, No. 8. There is a French translation (which I have used) in the *Revue des Eaux at Forêts*, Vol. 15, page 240.

the sea coast, expose villages and their cultivated lands to the action of storms.

In all these cases a proposal may be made, and a decision on it given, with the object of regulating—

(1) the manner of cutting and working the forest (forest exploitation);

(2) the execution of planting works;

(3) the construction of accessory works, such as dams, weirs, spurs, &c.

The proposal can only be entertained when the loss to be guarded against is shown to be greater than the loss to the forest proprietor from suffering the restrictions and carrying out the works proposed.

Various parties who have the right of initiating the proposal before the proper public tribunal are enumerated. The proposal has then to be examined, and one of the members of the tribunal (or even an expert unconnected with it) is appointed as Commissioner to draw up a project stating the regulation, and the works required in the particular case. This project is then deposited, so that interested parties may study it and send in objections if they wish to do so. Objections, if any, are decided on by the tribunal. The question, however, whether danger does or does not exist (if this is disputed) may be gone into as a preliminary before the project is prepared.

If the project is accepted and interference takes place, the forest proprietor is indemnified for his loss and for his expenditure on planting and other works. The party making the proposal is responsible for the indemnity, and for the cost of making and keeping in repair the necessary works; but in cases of danger—(*a*), (*b*), and (*c*)—the proprietors of all the estates menaced must contribute in a proportion fixed by the law.

In all cases the forest-owner must contribute to the expense of works of protection, *in a proportion also fixed by the law.*

§ 5.—*The Bavarian Law.*

The Bavarian law of 1852, Article 35, provides that private forest may, as a rule, be cleared, if the object is to devote the land to agriculture, to make it into a vineyard, or restock it with a superior class of forest trees; but this is not to be done if the forest is "protective" (*Schutzwald*). Article 36 specifies three kinds of protective forest:—

(1) *all* forest on summits and steep slopes of mountains;

(2) forest which protects against falling stones ("stone-shoots" I might call them—sudden discharges of masses of loose stones), avalanches, and landslips.

(3) forest belts which protect against shifting sands, and against the destructive action of rivers and streams.

No process of cutting by clearing entire blocks (*Kahlhieb*) is allowed in any protective forest; nor must the forest be "devastated"—worked in a destructive and wasteful manner (*verwustung*). Blanks and deficiently stocked places must be planted up.

§ 6.—*The Austrian Law.*

The Austrian law of 1852 in some respects resembles the French law.

No forest can be absolutely cleared away without permission. State forests can never be cleared save with special State sanction in certain grave and exceptional cases, as in time of war, &c.

No forest can be "wasted" so that it will soon cease to exist as forest, and timber growth become impossible[2].

Private owners may be compelled to re-stock blanks in their forests if these have a protective character. One forest must not be cut down so as to expose another to the action of wind and storm; a belt 20 klafters wide must be left.

In all forests at a great elevation, or on steep slopes, and wherever there is risk of the soil giving way, the forest must only be cut in narrow strips, which must be immediately re-stocked.

[2] Arts. 6 and 7.

Timber forest near the limit of tree vegetation must always be cut by the selection method (jardinage,—plänterhieb[3]), as this does not expose a large area of soil at once.

Forests of private owners are said to have a protective character, when they require special maintenance and treatment in the interest of the "security of the population and the safety of public and private property" against the various dangers which are enumerated, very much as I have already more than once enumerated them. Private forest in such case may be placed under restrictions (*bann*) by public authority. Compensation can be claimed where this results in a restriction of rights and the enjoyment of the property[4].

§ 7.—*The Italian Law.*

In Italy *all forests*, within certain limits[5], are placed under the provisions of the Forest law (*sottoposte al vincolo forestale*).

But lands cultivated with vines, olives, and fruit trees, and suitably terraced[6], are exempt from this rule.

Clearing and grubbing up by the roots (*disboscamento e dissodamento*) is prohibited; but permission may be given to change a forest into *bonâ fide* cereal cultivation if it is shown that means are provided to prevent any risk.

[3] Articles 2—4.

[4] Article 19. A provision is added which I should say was singularly inefficacious, *viz.*, that the forest-owner is to *take an oath* that he will observe (he is held responsible for so doing, besides) the special regulations prescribed for the forest placed in "bann." Inspection is of course provided for.

[5] The forests so situated are described in the law (June 1877) as "all woods and forests and lands covered with woody-stemmed vegetation (*piante legnose*)—(*a*) on the crests and slopes of mountains up to the upper limit of the growth of the chestnut (*Castanea vesca*), and (*b*) those which from their nature and situation might, if they were cleared away and rooted out, give rise to landslips, subsidences of soil, formation of precipices, avalanches, disturbances (to the public detriment) of the flow of water, alterations of the consistency of the soil (*e.g.*, bringing about a marshy state of the ground), or damaging local hygienic conditions."

[6] Compare Hazára Forest Regulation, II of 1879, section 20.

The forest committee[7] lay down certain principles as to the maximum amount of cutting, the method and locality of cutting, so as to prevent injury to the soil and secure the natural reproduction of the forest. To these the forest-owner is bound to conform.

The forest committee was charged with the duty of making a list of all lands that came within[8] the terms of law in their opinion, and provision was made for hearing and deciding objections of the parties interested, to this list.

There is a chapter on reboisement work. It is not necessary to give details. It applies to the lands under the forest law (*vincolati*) according to the terms of the statute. The proposal for reboisement work is originated either by the Minister of Agriculture, or the provincial or communal authorities. The work is carried out at the joint expense of the Government, the province, and the communes interested. The forest committee direct the work.

The State is always allowed to expropriate against an indemnity, any of the lands that come under the forest "*vincolo*," unless indeed the proprietor make a declaration that he will undertake to do the reboisement work in the manner and within a limit of time prescribed by the forest committee.

Provision is also made that a number of proprietors wishing together to reboise a certain area may form themselves into a recognised legal association (*consorzio*); and if some persons having lands in the middle of the group will not join, the rest may claim to expropriate him and acquire the land in question, so as to enable them to carry out their scheme[9].

[7] A committee consisting (*a*) of three members nominated by the Provincial Council; (*b*) of an engineer nominated by the Minister of Agriculture, Industry and Commerce; and (*c*) an Inspector or Sub-inspector of Forests. The "prefetto" of the province is *ex-officio* president. (See note at page 80 *ante*.)

[8] I do not go into detail, as of course this list has long ago been prepared; it would naturally exclude some lands that might have been included by older law, and include some that were in 1877 for the first time brought under the terms of the law by the definition above described.

[9] Law of 1877, Article 14. A number of these provisions are very excellent as provisions, but unfortunately so much is left to the committees, which may have a

§. 8.—*Law of Switzerland.*

Lastly, in this review of continental laws, I propose to notice the general law of 1876 for the maintenance of protective forests throughout Switzerland.

In many cantons there exist local laws for the preservation of forests, and in some the laws have been well observed for many generations[10]. These laws, even where they exist, vary from place to place, while in other parts there were as yet no laws, so that it became highly desirable for the Federal Legislature to agree on a common measure for protection of forests. This was the more important because the destruction of forest produces evils that are felt far beyond the limits of the canton in which the forest lies. The action of one or two torrents may be the cause of sudden and disastrous floods, which affect the river into which they discharge themselves, and sweep away or overflow properties many miles down-stream. A road may be covered with *débris* from a single badly denuded locality, and the communication of half a dozen important towns may be affected by it. Hence joint action was especially desirable.

The law applies to all mountainous cantons and to such parts of other cantons as are mountainous and as are declared to be subject to the law. In this zone of the federal forest *régime*, *all* forests, public or private, are under the "surveillance" of the Confederation, if they have a protective character; and all *public* and *communal* forests are included, even if not strictly speaking protective.

Article 4 describes what protective forests are, and in order to complete the series of definitions which I have already given from

majority of ignorant and prejudiced persons, who can defeat every proposal for enlightened action. Forest restoration demands foresight and a deliberate consent to put up with some present inconvenience for the sake of future safety; but the form 'ignorance' takes in forest matters is always a shortsightedness which can see nothing but the present. Hence it is that the forest law has worked so little good in Italy.

[10] Especially the northern cantons. See *Revue des Eaux et Forêts*, Vol. XV (July 1876), page 233.

several European laws for the sake of comparison, I will translate this also :—

"Forests of a protective character are those which by reason of their elevation, or their situation on steep-slopes, on mountain summits, ridges, spurs (*saillies*) ; or in the catchment areas of streams ; in mountain passes, ravines, and along the banks of streams and rivers; or being in a country generally devoid of trees;—serve as a protection against climatic influences, ravages by wind-storms, avalanches, falls of ice and snow, stone-shoots, subsidence of soil (*affaisement*), undermining of the soil by water (*affouillement*), erosion of ravines, and torrents and inundations[1]."

All cantons are charged with the duty of settling and declaring within three years what forests come under the law and what do not ; and they *must demarcate all protective forests* within a period of five years.

The Confederation appoints an Inspector and staff to see that everything is carried out according to the law.

Article 9 provides that the cantons shall open schools of forestry or give instruction (*au moyen de cours de sylviculture*), so as to provide for training a number of forest employés.

Article 11 unfortunately leaves it to the authorities of cantons to allow any part of the forest to be cleared : this is very dangerous ; but complete clearing in a protective forest is absolutely prohibited, and also of forests in the neighbourhood of protective forests, if such clearing would compromise the existence of the protective forest.

No exception can be made without sanction of the Federal Council. As usual, partition of communal forests or their alienation, is prohibited.

All rights of grazing and other forest rights are to be got rid of by compensation within ten years, if they are "incompatible"

[1] Protection against shifting sands, or against malarious influences, would naturally not find a place in Swiss mountains.

with the maintenance of the forest in such a state as to fulfil its object.

Wood-rights, if they cannot be bought out with money, may be commuted for a "parcel of land of the same nature" elsewhere. (Article 14).

All rights may be regulated and restricted to being exercised in certain portions of the forest only, or they may be if necessary "suspended or suppressed" (I presume with compensation under the preceding article).

No new rights are allowed to grow up.

All forests are to be managed according to schemes of working which are to fix the maximum annual yield.

The cantons are to arrange for the protection and exploitation of the forests.

A very necessary provision then follows. Hitherto, the law has only spoken of the protection of existing forests, but there may be many cases where now there is only bare land where there ought to be forest. Article 21 then provides that "lands which might become important protective-forests within the meaning of Article 4" shall be reboised on the requisition either of the Government of the canton or of the Federal Council.

If these lands appear to be private property, they must be expropriated under the usual law.

The Confederation will aid with its common funds important works of reboisement.

These are the chief provisions of the law which are likely to interest an Indian student[2].

[2] When I received the text of this law there was still an opportunity, though a short one, for its being altered; but I have not heard of any amendment being introduced.

CHAPTER X.

OF RULES MADE UNDER THE ACT.

§ 1.—*Reason why Rules are required.*

The idea of leaving the details of a measure to be worked out by local rules, while the principles are laid down in the Act itself, is not peculiar to India. The French Code of 1827 is supplemented by the "Ordonnance," which is nothing less than a set of subsidiary rules, though not quite of the same nature as rules made under the Indian Forest Act. But in India there is a peculiar necessity for enlarging the power of making rules, because the Act has to apply to different provinces, with people speaking different languages, and with considerable variety of local usages, domestic and agricultural wants, and living under widely different physical conditions.

The rules made under the Act are, in fact, parts of the law which it would be inconvenient to enact by the Central Legislature, and which are referred by delegation to the local Government. Rules under the Act are consequently of the same general character as sections of the Act itself. In other words, the rules must deal with matters which properly come within the scope of legislation, that is, involve the creation, extension, or limitation of some right or obligation, or impose some penalty or forfeiture; they do not concern themselves with matters of executive regulation or departmental practice, which can be prescribed by executive authority, and do not need legislative authority to give them force.

This point is not unimportant, because, quite contrary to the principle so stated, local rules are sometimes sent up for sanction which are full of matters of executive order, or departmental administration, such as the contents of schemes of working, the

salary or percentage of collections to be allowed as remuneration to village and other forest officers, and such like[1].

If we go through the Indian Act[2] we shall find that there are various sections which give power to make rules: these are sections 14*c*, 15, 25*i*, and 25 (last clause), 27, 31, 41, 51, 75.

All rules, without exception, have the force of law so far as they are consistent with the Act (section 77), provided they have been published in the local official gazette.

It will be observed that rules are to be made from "time to time," or (as in the Burma Act) it is said, in a separate section once for all, that all powers to make rules, &c., may be exercised from time to time. This is a legal form which obviates the objection that power given to make rules (*without* such qualifying phrase) could only be exercised once, and would be exhausted when once rules had been made, so that no further addition or amendment or new issue of the rules would be possible.

It is declared that rules for the management of village (communal) forests, under section 27, rules regarding protected areas (section 31), and rules regarding the control of timber in transit (section 41), require the sanction of the Governor-General in Council, as an additional condition to their legal validity. The Burma Act has not adopted this not very necessary addition. The only use of it is that a certain amount of uniformity in the rules is obtained. And it may be considered that, as the rules under section 41 really amount to a measure of local

[1] It is urged that it is convenient to have all the rules relating to a subject in one set or series, so that the subordinates who have to work the rules may understand the whole subject, both in its departmental and legal bearings. That may be very true, and there is nothing whatever to prevent the local authority printing and publishing the *rules which require legislative authority*, along with the notifications of fact and rules of practice relating to the subject in such a form that officers and the public may have the whole in a convenient pamphlet. But that is quite a different thing from placing under a common heading, as covered by legislative sanction, a mixed mass of rules that do, and rules that do not, require that sanction.

[2] The Burma Act is so similar that the student can easily make the comparison for himself.

legislation in which important restrictions may be placed on the ordinary liberty of transporting property, it is right that the highest authority should consider and sanction the rules. This reason could, however, hardly be given in case of rules under sections 27 and 31, which are matters that ought to be left entirely to local consideration.

The subjects on which the rules may be made are as follows:—

1. Rules for the guidance of Forest Settlement Officers awarding compensation for rights (section 15);
2. Rules for the general management of—

(*a*) permanent (reserved) forests (section 25, last clause.)

[NOTE.—These will rarely be wanted, since the management will, as our work progresses, be dependent on working schemes, which, though departmentally authoritative, could not be held to be in the nature of legal rules.]

(*b*) Rules for hunting and fishing in reserved forests. (Section 25*i*).

(*c*) Rules prescribed for regulating rights admitted to be exercised in reserved forests. (Section 14).

3. Rules for management of village forests. These—
   (i) Regulate the system of working;
   (ii) Prescribe the conditions under which the village enjoys the produce, &c.;
   (iii) Lay down the duties of the village for the protection and improvement of the forest. (Section 27). (Sanction of Governor-General in Council necessary).
4. Rules for the management and utilisation, as well as for the protection of areas called in the Act "Protected Forests." (Section 31). The subjects of the rules are specified in section 31. (Sanction of Governor-General necessary);
5. Rules for the control of timber in transit, whether by land or water. Separate rules are usually made for each kind of transit. The subjects are specified in section 41. (Require the sanction of the Governor-General);
6. Rules for management of *drift timber*, salving and disposing of it—subjects specified in section 5;

7. Rules for prescribing the *duties* of *forest* officers (section 75*a*);
8. Rules regarding payment of *rewards to informers* (section 75*b*);
9. Rules which may be required in some places where *valuable trees*, such as teak, blackwood, and so forth, *belong to Government*, but the *land on which they stand* is the property of (or in occupation of) *private* persons; to protect the *growth* and *reproduction* and provide for their *disposal* (section 75*c*);
10. General *subsidiary rules* which may be made on any subject necessary in order "to carry out the provisions of the Act."

Some of these rules are such that they prescribe conditions and terms, and do not require any penalty. But in all cases where a breach of a rule is clearly a penal one, and there is no special penalty, then the penalty of *imprisonment*, which may extend to *one month*, or *fine*, which may extend to *rupees five hundred*, or *both*, is in all cases applicable. (Section 76).

No penalty need be attached to any rules made under section 25, since section 25 itself specifies penalties. The same applies to rules made under section 31. But rules under section 41 are (section 42) to express their own appropriate penalties within the limits fixed by section 42. And so with rules under section 51.

§ 2.—*Meaning of Local Government.*

It will be asked what is meant by the "Local Government" which makes rules? It must be borne in mind that the General Clauses Act I of 1868 (section 2, No. 10), as regards *all* Acts passed *subsequent* to it, makes the term "Local Government" mean not only the Governor or Lieutenant-Governor, but also the Chief Commissioners. So that although, strictly speaking, in those provinces taken under the direct management of the Government of India, like Burma, Oudh, and the Central Provinces, the Governor-General in Council is the local Government, still the functions of the local Government are, by this definition, delegated in all cases

where the term "Local Government" is used without any restricting or explaining clause in Acts subsequent to 3rd January 1868[3].

§ 3.—*Remarks regarding Rules.*

A few words of explanation regarding the object and nature of the rules may now be offered.

Rules coming unedr the headings previously numbered 1, 2, 3, 5, 6, 8 require no explanation in this respect.

Rules under section 31 are somewhat peculiar: the subjects on which they are to be made are specified, but it will be observed that the penalties in section 32 apply partly to breaches of rule as such, and partly to acts which are offences against the declarations or prohibitions notified under section 29.

It is obvious that rules cannot be made to clash with such prohibitions.

For example, if a prohibition has been issued against clearing land for cultivation, this is absolute (as long as it is unrescinded), and rules cannot be made to allow cultivation under certain conditions[4]. Not so with reserved trees; for here the declaration under section 29 does not say that the trees are never to be touched or

[3] In Acts previous to this date (on which the General Clauses Act received assent) the definition does not of course apply, and then the term "Local Government" was used strictly; and when the Governor-General desired to delegate his functions as Local Government to the Chief Commissioner, who was the Local Administrator of his orders, he did so by a special Act, or by words in an Act. Thus, in 1867, the Act No. XXXII was passed to delegate certain powers to the Chief Commissioners of Burma, the Central Provinces and Oudh. Powers under all sections of the Police Act V of 1861 (except section 4) were delegated in this way for example. In the old Forest Act (VII of 1865) special provision was made for giving powers to Chief Commissioners.

This definition in the General Clauses Act does not operate to delegate powers if there is anything to the contrary; and when Assam, for instance, was separated from Bengal, special Acts were passed which made the Governor General the Local Government, and he had by notification expressly to delegate certain powers which he had as Local Government to the newly-created Chief Commissioner; powers of a Local Government under Act VII of 1878, are among them (Notification No. 522, Home Department: *Gazette of India*, 18th April 1874, page 182).

[4] This has not always been attended to. I have seen a draft in which it was said that no cultivation could be effected without permission, &c. Such a rule,

utilised, but only that they are "reserved;" consequently rules may prescribe the way in which trees reserved may be cut and utilised; only damage to such trees is absolutely forbidden.

Rules coming under head 7, are very important, as will be further seen in the chapter relating to the organisation of the forest service.

The Act[5] speaks throughout either of "a" or "any" forest officer, or else of "the" forest officer; and in certain sections (Article 67) speaks of officers "specially appointed." In the first case, of course, there is no doubt that all forest officers, of whatever grade, can act; but in the second, "the" officer is "the proper officer" or the officer "duly empowered in that behalf." Consequently rules under section 75 are needed to tell us *who* in these circumstances is "*the*" forest officer.

In the Burma Act another plan has been followed. In this, all acts are either done by "any" forest officer, or by one "specially empowered." This, equally with the Indian Act, requires a further expression of the pleasure of Government; but while in the Indian Act this is done by rules under section 75(*a*), in Burma it is done by official notification, declaring such and such grades of officers to be "specially empowered" to act under such and such sections.

Rules under head 9 refer to those cases (which occur chiefly in Bombay, but sometimes in other provinces) in which certain fruit or more valuable timber trees growing on otherwise private land belong to Government, and Government has a right to

could only be made either where no prohibition had issued, or in parts of the area to which the prohibition did not apply; for if cultivation has been prohibited, that means that the Collector *is to refuse all applications*. It is obvious that no waste land even now exists in which persons are permitted to seize on and occupy fields without permission; but the object of the prohibition is, that no such permission should be given. And so if there has been a prohibition against charcoal-burning, cutch-boiling, &c.

[5] The sections 16, 36, 67, and 60 (if a forest officer) contemplate the special appointment (by notification or otherwise) of the forest officer intended to be empowered; sections 43, 44, 45, 49, 52, 55, 58, 61, 62, 63, 64, 69, 71, 72, 74, 75, 78, 82 speak of "a" or "any" forest officer; sections 20, 24, 25 (*i*) 33, 38, 46, 47, 50, 56 speak of "*the*" forest officer (as known by rules under section 75*a*).

interfere so far as to *protect* the trees, see to their *reproduction* (if this is part of the right, but of course the introduction of the term in section 75 (*c*) does not create the right unless it exists), and provide for their *disposal*.

It is obvious that it may be very desirable to effect this object, although the land is so conditioned that it could not come under Chapter IV, nor yet be considered as in any sense a forest, whether "undivided" or otherwise.

Rules noted in the 10th heading (section 75 (*d*)) would cover the case of all matters which require to be provided under the Act, and which do not come within the specific enumeration of the subjects for rules under sections 31, 41, and 51. They possibly might be required in other matters, as in connection with timber duty and its levy.

§ 4.—*Remarks on drafting Rules.*

In drafting rules, it should be borne in mind that the terms must be consistent with the Act. The language should be precise and yet simple. Vague or general phrases which can be twisted to two or more meanings, must be avoided.

It is of great importance that terms which are *defined* in the Act, when used in the rules, should bear the legal meaning they have in the Act. And to secure this, the rules should open with a clause stating that all terms used in those rules and defined in the Forest Act have the same meanings as they have in the Act.

When rules are made under sections 31, 41, 51, &c., where a list of the topics or heads of rules is given by law, care should be taken that each rule can be clearly shown to come under one or other of those heads. If further points are to be ruled, not so included, but still within the general terms of the law, they should be exhibited as made under the general subsidiary powers of section 75.

Matters of administrative, departmental, or executive order, which do not require the sanction of the Act, and which the Local Government, or even the Conservator or the Divisional Officers, can

order as an executive matter, should not be introduced, as already explained. It may indeed be sometimes necessary, in order to make a subject intelligible, or to obviate any misapprehension, to make mention of some matter which does not require actual legislative sanction; but this should be introduced only when absolutely necessary, and as sparingly as possible.

It will be observed that when the Act gives power to the local Government by rule to authorise routes for export, or to levy fees on passes, &c., the rule must specify the routes and fees. But the rule is often drafted so as to declare that an authorized route is one on which the Conservator has established depôts for the examination of timber, and which he has duly notified, or the fees for passes are such as the Conservator shall, with approval of so and so, notify. This is illegal: it is held to amount to the *delegation* to the Conservator, &c., an authority which the Act says is to be exercised by the local Government itself, subject to the sanction of the Governor-General in Council. And so with regulating payments by rule under section 31(*d*) [6]. The rule must specify this, not say, that the payment is such as the Conservator of Forests in consultation with the Deputy Commissioner publishes in the bazaar or such like[7].

[6] In the Burma Act, it will be observed (section 36*h* &c.) it is said, that the rules may "prescribe *or authorise some specified officer to prescribe*" the fees, &c.; this obviates the difficulty.

[7] It has been held that under section 41(*b*) a rule could not be made requiring passes for *charcoal*, because this is not included in the definition of "timber" or of "forest produce." I suppose that it is held to be no longer "wood," but a *nova species*; I can hardly think, however, that this is maintainable, for the definition clause does not say that these things *are* forest produce and no others, but that the term *includes* the things mentioned: and charcoal is so very obviously an article of forest produce that the matter could hardly be doubted. In the Burma Act the word has been added in the definition clause.

I may also note that, according to the customs of legal interpretation, when it is said that a thing is done, or may be done, by some specified means or agency "or otherwise"—the word *otherwise* does *not* mean (in fact) to imply *another* or *different* method, but some *method analogous* to that mentioned.

PART III.

THE CRIMINAL LAW AS APPLIED TO THE PROTECTION OF FORESTS AND THEIR PRODUCE IN TRANSIT.

CHAPTER XI.

PROTECTION OF FORESTS AGAINST NATURAL CALAMITIES.

[NOTE.—Throughout these chapters it is expected that the student will refer to the Forest Act and the Indian Penal Code[1], and read the text of each section referred to.]

Forest estates, as I have remarked in a previous chapter, are threatened with two great classes of dangers, one is the large class of natural calamities, the other a still more extensive group of trespass and offences by men and cattle. Against the former the *law* can only make *indirect provision*. It can insist, for example, on one proprietor keeping up the whole or part of his forest, so as not to cause the exposure of the neighbouring forest or other property, to the fury of the wind, or the sweep of avalanches and snow-drifts. It can prohibit the destruction of, or interference with, birds of some or all kinds, in order that these may multiply and destroy the grubs or *larvæ* of insects[2] that attack wood, and caterpillars that eat off the eaves or injure the leading shoots of trees. Legal provision may be made for requiring assistance of right-holders and others in destroying caterpillars or locust-grubs.

The rules which regulate hunting may be the means of encouraging the destruction of those wild animals which are injuri-

[1] Act XLV of 1860, as amended by Act XXVII of 1870 and Act VIII of 1882. The latter comes into force on 1st January 1883 and will affect several sections, chiefly clearing up by legislative authority some points that are now held on the authority of decisions. This Code is quoted as Indian Penal Code.

[2] In several continental countries there are laws for the protection of birds; and I have read some rather detailed legal rules about the collection of ants' eggs (so-called—properly *pupæ*), ants being useful to a forest on account of their being enemies to caterpillars. (This, of course, does not meet with its parallel in India, at least as far as *white* ants are concerned, which are a great nuisance in forests.) (See Eding, p. 165 *et seq.*) In Saxony, a law was passed (17th July 1876) for the protection of forests from ravages by insects. I have not seen the text of the law.

ous to forests by grubbing up roots, barking, and nipping off the leading shoots of young trees.

Goats and other destructive animals may also be kept out by rule; but these being domestic animals, damage by them more properly comes under the next head.

In India, at our present stage of progress, it would not have served any useful purpose to have enacted in the Forest law any detailed rules on these subjects.

The preservation of *birds*, which is one of the first and most natural measures, as tending to protect the forest from insects and their *larvæ*, can be secured under our law, by rules made to suit local circumstances, under section 25. It is not necessary that these rules should relate *only* to game. The same rules also may be made the means of encouraging (where necessary) the destruction of noxious animals.

As regards the destruction caused by cattle under the control of man, that is partly provided against by the regulation of grazing rights, which we have already considered, and partly by the law of *trespass*, which comes under the next head.

Much interesting information on the subject of natural calamities will be found in the continental forest text-books; but here, as I am concerned only with the legal aspect of the subject, I must pass it by with this brief notice.

Forest fire might perhaps be classed as a natural calamity, because it *may* originate in a lightning stroke, but more often it is caused by human agency, and as it is the subject of direct legal enactment, I prefer to treat it under a separate section intermediate between the two.

I shall afterwards pass on to the other class of dangers to which the forest is exposed—offences by human agency and by cattle trespass—that is, all contraventions of the forest or general penal law which give rise to a criminal prosecution, and a penalty.

There may be also *injuries* to the forest which may not be *offences*, but may only give rise to civil action for damages.

CHAPTER XII.

PROTECTION AGAINST FIRE.

§ 1.—*Necessity for Special Rules.*

It is in relation to this question that the need of a special law for forests is most clearly illustrated.

To burn a forest is to cause, in a few hours, the loss of property which it has taken a century or more to produce or build up: and the injury to the public, for many years to come, by such destruction, is so great, and is at the same time so very easily caused, that it is absolutely necessary not only to punish wilful incendiarism[1], but also to prohibit acts which are in themselves not criminal, but which expose the public domain to this terrible risk, or which facilitate the extension of fire from a neighbouring place to the forest itself.

§ 2.—*In Reserved Forests.*

Actual *setting fire to* a reserved forest is an offence under section 25 (*b*), or to a protected tract under section 32 (*d*): and in either case a grave case may be prosecuted under the section of the Penal Code, already quoted in the note.

But besides this direct penalty for an offence accomplished, there are acts prohibited, the object being to prevent the possibility of fire reaching a forest. Under section 25, it is accordingly made penal to kindle any fire in such a manner as to endanger the forest. A person may carelessly set fire to some grass perhaps on the edge of a forest, with no intention of actually burning the forest itself;

[1] Indian Penal Code, section 435.—Mischief by fire, intending damage, or knowing it likely that damage will be caused to the amount of Rs. 100 or upwards, is punishable with imprisonment which may extend to seven years and fine, or with both.

yet there is so obvious and imminent a risk of this result occurring that the act is prohibited and rendered penal[2].

Another very useful provision is also made by clause (*c*) of this section (25). During certain seasons the forest is exceptionally dry, and the grass, leaves, and other such materials on the ground are ready to start into a blaze, at the least thing: an accidental spark, or the coal of a 'huqa' dropped on the ground, may set the whole on fire. It is absolutely necessary to prevent fire being carried or kindled during these seasons. And, to make the matter secure, the Act, it will be observed, puts the matter in a somewhat peculiar manner. It does not say that the forest officer may *prohibit* carrying, &c. of fire at certain seasons, *but it prohibits generally the carrying or kindling of fire except*, at such seasons, when the forest officer notifies that it is allowable to do so. In other words, carrying or kindling fire *is generally prohibited*, but a power is given to *allow* it, at certain seasons only when there is no risk. Any breach of this prohibition (whether or not a fire actually breaks out) will make the offender liable to the penalty.

§ 4.—*Suspension of Rights.*

In a "reserved" or permanent forest estate, there is an additional clause to section 25, which is in many cases found more efficacious as a protection against fire than fine or imprisonment. Wherever a fire has been caused wilfully or by gross negligence, the local Government may order (whether or no any other penalty has been inflicted) that the forest, or any part of it, may be *closed* for such time as it thinks fit, and all rights of grazing or to collect forest produce be suspended.

[2] In forests where grounds are demarcated inside the reserve for the practice of "toungyá," or "kúmri" or "júm" cultivation, there is great risk of this fire spreading. The actual kindling of fire in such grounds cannot be punished, because of the exception to section 25 already described: the act is done by virtue of the permission which sets apart the grounds for such cultivation. But one of the very first steps in conservancy in such cases is to take measures to prevent the fire spreading either to the forest, or to the other parts of the block allotted to such cultivation.

§ 5.—*Protected Forests.*

In tracts of forest merely "protected," there is a general power given by section 31, to make rules which may protect timber and valuable trees from injury; and besides this (as already noted), section 32, clauses (*c*), (*d*), make it penal to set fire to the forest, or to kindle fire without taking precautions to prevent its spreading and injuring timber lying in the forest, or "reserved" kinds of trees, or extending to a closed portion of the tract; and also the negligent act of leaving unextinguished a fire (which may have been lawfully kindled, but) which left thus burning, with no one to look after it, may give rise to a forest conflagration. This rule applies whether the fire is actually inside the forest or in its vicinity only[3].

§ 6.—*The Burma Act.*

The Burma Forest Act contains provisions generally similar to those of the Indian Act, but further adds in section 26 (regarding reserved forests) that rules may be made *about leaving fire burning* in the forest. This is necessary where the forest is large, and where travellers require to halt for the night inside the forest, and light fires for cooking, &c. These rules would be made regarding the clearing of camping grounds and the lighting fires in such places, and the extinguishing of them when the traveller proceeds next day on his journey. It is also an extremely careful rule to provide that when people are about to burn their toungyâ refuse, &c., in the vicinity of a forest they must *give notice* to the forest officer.

The carrying of *torches* at night, it is perhaps hardly necessary to add, is just as much an offence as any other form of fire carrying.

Persons must not travel at night through forests (unless at a season when the carrying of fire is allowed).

§ 7.—*Further protective provisions.*

Among other provisions for protection against forest fires, it is of importance to have early notice of a fire breaking out, and to

[3] It would have been well if this specific clause had been repeated in section 25, although the wide terms of section 25, clause (*b*), certainly include such a case.

have the assistance of as many persons as may be available, in quenching it. Section 78 contains such provisions. In any reserved forest or protected area *every person*—

(*a*) who exercises any forest right,

(*b*) who holds a permission to take forest produce, or cut or remove timber, or pasture cattle[4],

(*c*) who is a servant or employé of the persons (*a*) and (*b*),

(*d*) who is a village officer, or who receives from Government any emolument for services to a community in the vicinity of the forest,

is bound to give information of forest offences, and consequently to inform about any intention to set fire, or the occurrence of any fire, and also to *assist* any police or forest officer demanding their aid—

(*a*) in extinguishing a fire,

(*b*) in preventing a fire in the vicinity from spreading to the forest[5], and

(*c*) discovering and arresting the offender (if one is found or suspected).

§ 8.—*Continental laws on Fire protection:—France.*

It will here be specially useful to enquire what provisions the Codes of continental laws have made for the protection of the forest against fire.

[4] Under the French law (C. F., Art. 145), persons who have bought the timber to be felled and are in possession of the forest to work it out (*adjudicataire*) are made responsible for all forest offences that occur in the forest they are working in, and within a specified distance.

[5] The arrest of fire is often effected by organising lines of men to beat out fire with fresh boughs, in some cases to throw fresh-dug earth on burning grass, &c., for water is rarely available. In other cases men are employed to cut down and clear a strip of forest of all vegetation easily removed, so as to stop the fire by the want of material to carry it on. Sometimes counterfires may be lighted with success; but this (and indeed all proceedings of the kind) require careful watching by a body of men acting under orders.

Under the French Code (article 42), purchasers of the annual cutting[6], their workmen and agents are forbidden to light any fires outside their lodges or huts or sheds under penalty of 10 to 100 francs, besides liability to damages. Burning of charcoal is regulated under article 38 by written order as to its locality.

Article 148 prohibits the kindling of fire (under any pretence whatever) inside a forest or within a distance of 200 *mètres* from it[7]. Lighting a fire contrary to this rule is punishable with fine from 20 to 100 francs. And if a forest fire actually breaks out in consequence, the punishment for mischief by fire under the Penal Code[8] may be inflicted besides damages.

Under Article 149 of the Code For., provisions similar to those of the Indian law are enacted compelling right-holders, &c., to help in case of fire; and in case of refusal they may be deprived of their right for at least one year, or at most for five years; besides being liable to punishment under article 475 of the Penal Code. (This section refers to refusal to help a public servant demanding aid, similar to our own Indian Penal Code, section 187).

Article 151 prohibits the establishment of lime or plaster of Paris kilns, brick or tile kilns, without special permission, within one kilometre of the forest, on penalty of a fine of 100 to 500 francs, and the demolition of the structure.

§ 9.—*German law.*

In Prussia[9] no fire may be lighted inside a forest or in dan-

[6] The trees to be cut in the forest for the year according to the working plan are in France usually sold standing, and the purchaser cuts and removes them; there is a special procedure for the "adjudication" of the "coupe," and conditions as to the removal, followed by a careful scrutiny on the expiry of the time to see that all conditions have been duly observed.

[7] This refers of course to fires out-of-doors, not to fires lighted inside a house which happens to be within 200 mètres of a forest boundary (Curasson, II, 18).

[8] By article 434 of the French Penal Code, a *wilful* incendiary of a *house* or a *forest* may be punished even with death. This of course refers to an atrocious form of crime committed deliberately out of hatred or for motives of vengeance (*Curasson*, II, 404); but an intentional setting on fire of a forest, even with less criminal motive, would be as severely punished as under the Indian law.

[9] *Rönne*, p. 761.

gerous places within five "ruthen" (=a pole or 5½ yards) of the forest boundary.

Tobacco smoking off the public and authorised roads is not allowed in pine forests between 1st April and 1st October. A prohibition also exists[10] against the use of pipes without covers (which prevent burning particles from falling), also against shooting with paper gun-wads which may be smouldering and fall among dry grass. The provisions apply to private as well as public forests. These provisions may be usefully noted for Indian practice.

In Saxony, smoking cigars and pipes without covers in forests is forbidden[1], and the use of flaming matches, as well as kindling fire in any dangerous place, is forbidden. The police are bound to make these prohibitions generally known by issuing notices, advertising in the local newspapers, &c.

As usual, fire may not be kindled at all inside a forest, nor in dangerous proximity to it (*in gefahrbringender Nähe*); the law also prohibits the leaving unextinguished of any fire which may have been lawfully kindled.

The assistance of the whole of the residents of the nearest township or village, as well as that of all forest officials and those employed under the Game Laws, may be demanded: and persons so called on are to bring spades, axes, ladders, &c., which may be necessary for the work of extinguishing the fire, and may also be called on, after the fire is out, to organise a watch for a time to see that the fire is really out and does not break out again[2].

The Bavarian law contains generally similar provisions[3]. Fire may not be kindled in a forest nor within 300 Bavarian feet from it, without precautions to prevent its spreading to the forest itself. Forest officers have a power similar to that in the Indian Act, of prohibiting the carrying or kindling of fire in any shape in exceptionally dry weather.

[10] Id., p. 800. See also Eding, p. 172.
[1] Qvenzel., p. p. 100-103.
[2] *Dorf feuer Ordnung*, Cap. III, § 20 and IV, § 1.
[3] *Law of 1852*, Art. 45 *et seq.*

The duty of extinguishing fires when done with, is also imposed.

§ 10.—*Austrian law.*

The Austrian law[4] forbids lighting fires in the forest or on the borders (*am Rande*). Anyone who sees a fire left burning is bound to put it out. Passengers going along roads, if they see a forest fire, are bound to give information at the nearest house, and the householder is then bound to convey information to the nearest forest officer, or, if there is none, to the nearest local officials. The officials can demand help as under the Saxon law, and are specially empowered (which is useful) to 'take the command' and *issue orders as to what each person is to do* in effecting the suppression of the fire.

§ 11.—*Italian law.*

The Italian law refers the regulation of all matters connected with protection from fire to *rules* to be made by the Forest Committees and submitted to the Provincial Council[5]. When these are agreed on, penalties for their breach may be provided by higher authority.

These rules do not contemplate the actual crime of setting fire to the forest; they merely contain protective and general provisions such as those I have been describing. Actual mischief by fire is prosecuted as a criminal offence under the Penal Code. The rules may regulate the kindling of fire, the burning of weeds or stubble in fields, and so forth, on land contiguous to a forest.

They may also regulate the establishment of lime-kilns, brick-kilns, and kilns for tile-burning; also the manufacture of pitch, rosin, lampblack, pyroligneous acid (made from wood chips), potash, &c., and all other factories and furnaces for which "a copious consumption of wood may be necessary[6]."

[4] Law of 1852, Arts. 44, 45, 46.

[5] Law of June, 1877, Art. 45.

[6] The construction of *chârcoal* pits or kilns (the word used is *aio*, which means a threshing-floor, a barn, or in fact any place of the kind set apart for some special work) and the sheds (*capanne*) for sheltering the workmen are specially mentioned under a separate head.